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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,443	01/30/2004	Frederick Ware	RAMB-01033US1	8919
7590	02/24/2006		EXAMINER	
Kirk J. DeNiro, Esq. Vierra Magen Marcus Harmon & DeNiro LLP 685 Market Street Suite 540 San Francisco, CA 94105			NGUYEN, TRUNG Q	
		ART UNIT	PAPER NUMBER	2829
DATE MAILED: 02/24/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/768,443	WARE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Trung Q. Nguyen	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 November 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-181 is/are pending in the application.  
 4a) Of the above claim(s) 15-179 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-9 and 180-181 is/are rejected.  
 7) Claim(s) 10-14 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                           |                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                               | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                      | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1005</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|                                                                                                                                           | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Election/Restrictions***

1. Applicant elected without traverse of Group I claims 1-181 and follow with the Species of Fig. 3 which claims 1-14 and 180-181 in Paper No. 1105 is acknowledged.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 6-9 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

Regarding claim 6, it is unclear which part of the semiconductor device is configured to be coupled to at least one reference signal.

Claims 7-9 are rejected for being dependent on rejected claim 6.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Komatsu et al. (U.S. 6, 631,486).

Regarding claims 1 and 180-181, Komatsu et al. disclose in Fig. 3, a test circuit 10, a first element 31 and second element 36 wherein first element comprises a transmitter when the second element comprises a receiver and vice versa (switch 34 can switch either first or second element connect to either receiver 33 or transmitter 32) and second element comprising at least one transmitter 32 and receiver 33.

Regarding claims 2-4, Komatsu et al. in column 6, the high and low speed receiver can operate in the range of 50-400Mbps, this is well known in the art that it is operating in a high frequencies.

Regarding claim 5, Komatsu et al. disclose in Fig 3, the test circuit includes a pattern generator 11 and pattern compare circuitry 12.

#### ***Allowable Subject Matter***

6. Claims 6-9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. Claims 10-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: claims 6 and 10 recite, inter alia, "at least one reference signal that includes a voltage reference signal, Vref, and wherein the test circuit includes at least one comparator circuit for comparing at least one voltage signal representing received date with the Vref signal".

The art of record does not disclose the above limitations, nor would it be obvious to modify the art of record so as to include the above limitations.

### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Trung Nguyen** whose telephone number is **(571) 272-1966**. The examiner can normally be reached on Monday through Friday, 8:30AM – 5:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Fahmy, Wael** can be reached at **(571) 272-1705**.

*Trung Nguyen*

Patent Examiner  
Group Art Unit 2829  
February 17, 2006

*Vinh Nguyen*  
VINH NGUYEN  
PRIMARY EXAMINER  
A.U.2829  
02/21/06